

AMENDMENTS TO THE CLAIMS

1. (Currently amended) [[Plant]] Sunflower seeds that contain [[an]] oil having an oleic acid content of more than 40 wt% and a stearic acid content of more than 12 wt% based on the total fatty acid content of said oil, [[and]] wherein a maximum of 10 wt% of the fatty acid groups in the *sn*-2 position of the [[TAG]] triacylglycerol molecules are saturated fatty acids, and wherein the oil has a linoleic acid content of less than 20 wt%.

2. (Currently amended) [[Plant]] Sunflower seeds according to claim 1, wherein the seeds contain an oil that has in the *sn*-2 position of the [[TAG]] triacylglycerol molecules constituting the oil a maximum of 8 wt% of saturated fatty acid groups.

3. (Currently amended) [[Plant]] Sunflower seeds according to claim 2, wherein the seeds contain an oil that has in the *sn*-2 position of the [[TAG]] triacylglycerol molecules constituting the oil a maximum of 5 wt% of saturated fatty acid groups.

4. (Currently amended) [[Plant]] Sunflower seeds according to claim 1, wherein the oleic acid content is from 55 to 75 wt%.

5. (Currently amended) [[Plant]] Sunflower seeds according to claim 1, wherein the stearic acid content is from 15 to 50 wt%.

6. (Currently amended) [[Plant]] Sunflower seeds according to claim 5, wherein the stearic acid content is from 20 to 40 wt%.

7. (Currently amended) [[Plant]] Sunflower seeds according to claim 1, wherein the oil has a total level of saturated fatty acids of at least 20 wt%.

8-9. (Canceled)

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10. (Withdrawn) Oil having an oleic acid content of more than 40 wt% and a stearic acid content of more than 12 wt% based on the total fatty acid content of said oil, and wherein a maximum of 10 wt% of the fatty acid groups in the *sn*-2 position of the TAG molecules constituting the oil are saturated fatty acid groups.

11. (Withdrawn) Oil as claimed in claim 10, as contained in plant seeds as claimed in claim 1.

12-13. (Canceled)

14. (Currently amended) Method for producing a sunflower plant which forms seeds as claimed in claim 1, which method comprises:

a) providing sunflower seeds which contain [[an]] oil having a stearic acid content of at least 12 wt%;

b) providing sunflower seeds which contain an oil having an oleic acid content of at least 40 wt% and a thioesterase activity over stearyl-ACP of at least 10% of the thioesterase activity over oleoyl-ACP;

c) crossing sunflower plants grown from the sunflower seeds provided in step a) and b);

d) harvesting the F1 seed progeny.

15. (Currently amended) Method as claimed in claim 14, further comprising the steps of:

e) planting the F1 progeny seeds to grow sunflower plants;

f) self-pollinating the sunflower plants thus grown to produce F2 seed;

g) testing the seed for the presence of a stearic acid content of at least 12 wt%, an oleic acid content of at least 40 wt% and a thioesterase activity over stearyl-ACP of at least 10% of the thioesterase activity over oleoyl-ACP;

h) planting sunflower seeds having ~~the desired levels of stearic acid content, oleic acid content and thioesterase activity~~ a stearic acid content of at least 12 wt%, an oleic acid content of at least 40 wt%, and a thioesterase activity over stearyl-ACP of at least 10% of the thioesterase activity over oleoyl-ACP to grow sunflower plants;

i) self-pollinating the sunflower plants thus grown to produce F3 seed; and

j) optionally repeating steps g), h) and i) until the ~~desired levels of stearic acid content and oleic acid content and the high thioesterase activity~~ stearic acid content of at least 12 wt%, the oleic acid content of at least 40 wt%, and the thioesterase activity over stearyl-ACP of at least 10% of the thioesterase activity over oleoyl-ACP are fixed.

16. (Currently amended) Method as claimed in claim 14, wherein the seeds which contain [[an]] oil having a stearic acid content of at least 12 wt% are provided by:

a) mutagenic treatment of sunflower seeds having a stearic acid content of less than 12%;

b) producing sunflower plants therefrom which are pollinated to produce seeds;

c) testing the seeds for the desired stearic acid content; and

d) optionally repeating steps b) and c).

17. (Canceled)

18. (Withdrawn) Meal or crushed seeds originating from seeds according to claim 1.

19. (New) Sunflower plants obtained by the method of claim 14.

20. (New) Sunflower plants obtained by the method of claim 15.
21. (New) Sunflower plants obtained by the method of claim 16.

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